

ABSTRACT OF THE DISCLOSURE

An aerodynamic base drag reduction apparatus and method for bluff bodies, such as tractor-trailer trucks, utilizing a pair of lift surfaces extending to lift surface tips and located alongside the bluff body such as on opposing left and right side surfaces. In a flowstream substantially parallel to the longitudinal centerline of the bluff body, the pair of lift surfaces generate a pair of counter-rotating trailing vortices which confluence together in the wake of the bluff body in a direction orthogonal to the flowstream. The confluence draws or otherwise turns the flowstream, such as the flowstream passing over a top surface of the bluff body, in and around behind a trailing end of the bluff body to raise the pressure on a base surface at the trailing end and thereby reduce the aerodynamic base drag.